

SEP 26 2008

PATENT APPLICATION

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, Colorado 80527-2400

ATTORNEY DOCKET NO. 200207945-2

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Maurizio PILU  
Application No.: 10/822,696  
Filing Date: April 13, 2004

Confirmation No.: 2914  
Examiner: Chia Wei A. CHEN  
Group Art Unit: 2622

Title: ATTENTION DETECTION

Mail Stop Appeal Brief-Patents  
Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEFTransmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on June 26, 2008

- ☒ The fee for filing this Appeal Brief is \$510.00 (37 CFR 41.20).  
☐ No Additional Fee Required.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

- ☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☐ 1st Month  
\$120☐ 2nd Month  
\$460☐ 3rd Month  
\$1050☐ 4th Month  
\$1640

- ☒ The extension fee has already been filed in this application.  
☐ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of \$ 510 . At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

- ☐ A duplicate copy of this transmittal letter is enclosed.

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Date of facsimile: September 26, 2008

Typed Name: Allan M. Lowe

Signature: 

Respectfully submitted,

Maurizio PILU

By 

Allan M. Lowe

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Rev 10/07 (Ap/Brief)

Docket No. 200207945-2 US (1509-487)

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PATENT

**THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of	
Inventor: Maurizio PILU	: Confirmation No. 2914
	:
U.S. Patent Application No. 10/822,696	: Group Art Unit: 2622
	:
Filed: April 13, 2004	: Examiner: Chia Wei A. CHEN
For: ATTENTION DETECTION	

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Attn: BOARD OF PATENT APPEALS AND INTERFERENCES

**BRIEF ON APPEAL**

Further to the Notice of Appeal filed June 26, 2008, in connection with the above-identified application on appeal, herewith is Appellant's Brief on Appeal. The Commissioner is authorized to charge Deposit Account No. 08-2025 in the amount of \$510 for the statutory fee.

To the extent necessary, Appellant hereby requests any required extension of time under 37 C.F.R. §1.136 and hereby authorizes the Commissioner to charge any required fees not otherwise provided for to Deposit Account No. 08-2025.

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**I. Real Party in Interest**

The real party in interest is Hewlett-Packard Development Company, L.P., a Texas limited partnership.

**II. Related Appeals and Interferences**

There are no related appeals and/or interferences.

**III. Status of Claims**

**A. Total Number of Claims in Application**

1. There are 59 claims in the application, which are identified as claims 1-59.

**B. Status of all the claims**

1. Claims canceled – 33 and 39
2. Claims withdrawn from consideration but not canceled – None
3. Claims pending – 1-32, 34-38 and 40-59
4. Claims allowed – None
5. Claims rejected – 1-32, 34-38 and 40-59

**C. Claims on Appeal**

1. Claims on appeal are claims 1-32, 34-38 and 40-59

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**Status of Amendments**

All amendments have been entered all amendments have been entered. There was no amendment after final rejection, except the amendment which was filed on the same day as this Brief and corrects a typographical error noted in the final rejection. Appellant has prepared this Brief in the expectation that the amendment accompanying this brief will be entered.

**V. Summary of Claimed Subject Matter**

Claim 1 is directed to an attention detection system (title, paragraph 0001) comprising at least one first sensor device 203 (rectangular box illustrated on male figure on left side of Figure 2) for generating a host perspective signal relating to a host wearer 201 (male figure 201 on left side of Figure 2) from the perspective of a host 201 and relating to attention clue signals indicative of the attention of the host wearer 201 to the host perspective signal (paragraph 0043, page 10). At least one second sensor device 204 (rectangular box illustrated on female figure 202 on right side of Figure 2) generates a signal relating to the host wearer 201 from the perspective of an observer 202 (female figure on right side of Figure 2; paragraph 0043, page 10). The signal generated by device 204 relates to said attention clue signals indicative of the attention of the host wearer 201 (paragraph 0043, page 10). A portable attention detector in first sensor device 203 receives the host perspective and the perspective attention clue signals and determines a situation of raised attention (paragraph 0052, penultimate line) of said host wearer 201 from said received host 201 perspective attention clues and said received observer 202 perspective attention clues (paragraph 0046, page 11; paragraph 0021, page 6).

Independent claim 23 relates to a method of capturing images using at least one camera device 204 (the rectangular box on the female figure on the right side of Figure 2; paragraph 0052, last sentence, page 12) or 900 (Figure 9, paragraph 0071). The method includes detecting an attention clue exhibited by at least one first animate object 201 (the male figure on the left side of Figure 2) from the perspective of a host second animate object 202 (the female figure on the right side of Figure 2) carrying

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said at least one camera device 204 (paragraph 0052, page 12). The attention clue is captured by said at least one camera device 204 and indicates the attention of the first animate object 201 is drawn by a subject, such as movement or two-dimensional images (paragraph 0052, page 12). An attention clue 403 of said second animate object 202 is detected from the perspective of an observer 201 external of said second animate object 202 (paragraph 0052, page 12). The at least one camera device 204 is activated so it captures an image of said subject in response to detection of said attention clues of the first and second animate objects (paragraph 0052, page 12).

Independent claim 30 is directed to a method of automatically capturing an image (paragraphs 0047-0050, pages 11 and 12; Figure 3). The method includes detecting at least one attention signal (performed by attention detection module 302; paragraph 0048) in response to a detectable body parameter of at least one animate object (the male figure 201 on the left side of Figure 2). The body parameter is detected by people observing device (POD) 300 (paragraph 0048, page 11). The at least one attention signal is analyzed by attention detection module 302 to determine an interest level of said at least one animate object 201 (paragraphs 0048 and 0049, pages 11 and 12). The analysis is performed in a mode of an observer perspective of said at least one animate object (paragraph 0050, page 12). The image is captured in response to said interest level (paragraphs 0051 and 0052, last three sentences, page 12).

Independent claim 34 relates to an image capture device 700 (Figure 7, paragraphs 0060-0064, pages 15 and 16) comprising an image detector device 703 (paragraph 0060, page 15) for capturing an image. An attention detection component 605 determines an attention signal of a person from a self perspective (paragraph 0057, lines 7, 8, page 14; paragraph 0059, first two sentences, pages 14 and 15; paragraph 0063, pages 15, 16). A transponder device 701 receives activation signals from a remote source (paragraph 0061, page 15). The attention detection component 605 is configured for identifying said activation signals (paragraph 0062, first sentence, page 15; paragraph 0063, pages 15 and 16). An image is captured by image detector device 703 in response to said self perspective activation signal and said received

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activation signal (paragraphs 0061-0063, pages 15 and 16; paragraph 0075, first sentence, page 18; paragraph 0077, first sentence, page 19).

Independent claim 35 is concerned with a device 500 (Figure 5; paragraphs 0053-0056, pages 13, 14) for observing at least one first animate object 202 (for example, the female figure on the right side of Figure 2). Device 500 comprises an interface 507 for interfacing with at least one sensor device for deriving a first signal indicative of an attention state of the first animate object 202 (paragraph 0053, lines 9 and 10, page 13). Interface 507 receives a sensor signal representing aspects of body language of the first animate object 202, which aspects are observed from a position external of said first animate object 202. An example of such a position external of the first animate object is the position of the male figure 201 on the left side of Figure 2. An analyzer, in the form of attention detector 509, determines from said first signal and said sensor signal at least one attention clue related to a second animate object observing the first animate object (paragraph 0053, last two lines, page 13; paragraph 0055, last two lines page 13). An example of the second animate object is the male figure 201 on the left side of Figure 2. A transmitter, in the form of transponder 501, transmits the attention clue signals (paragraph 0053, line 2, page 13; paragraph 0055, lines 1-3, page 13; paragraph 0056, page 14).

Independent claim 38 relates to an attention detection component 600 (Figure 6; paragraphs 0057-0059, pages 14, 15; paragraph 0063, pages 15, 16) for determining a level of attention of at least one animate object, for example, the male figure to the left of Figure 2. The component includes an analyzer 605 (paragraph 0057, lines 7 and 8, page 14) for at least one attention clue signal. The analyzer determines from the attention clue signal, a level of interest of said at least one animate object (paragraph 0058, page 14). The attention detection component 600 is operable for analyzing said attention clues in a self perspective mode, in which said attention clues relate to the at least one animate object. The self perspective mode is defined in paragraph 0018, page 5 as a mode in which a detector device observes situations from the perspective of a host person who is wearing an image capture

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device. In this mode, the device may receive attention clues in the form of sensor signals of parameters of the wearer.

Independent claim 42 defines a computer readable medium storing a computer program for causing a computer (paragraph 0076, page 18) to (1) analyze a plurality of sensor signals (as derived, for example, from sensor 203 worn by the male figure 201 of the left side of Figure 2) representing attention clues collected from a self perspective of a first animate object, for example the male figure 201 on the left side of Figure 2 (paragraph 0043, third sentence, page 10; paragraph 0045, lines 1 and 2, page 10), and attention clues collected from an observed perspective (as derived, for example, from sensor 204 worn by the female figure 202 on the right side of Figure 2) of said first animate object 201 (paragraph 0043, page 10; paragraph 0045, first sentence, page 10), (2) determine from said sensor signals and collected attention clues, a behavioral mode of the first animate object 201 (paragraph 0045, first sentence, page 10); and (3) generate an image capture trigger signal 404 for triggering an image capture device (for example, sensor 203 worn by the male figure 201 on the left side of Figure 2) to capture image data, in response to said sensed behavioral mode of said first animate object 201 (paragraph 0052, penultimate sentence, page 12; paragraph 0061, first sentence, page 15; paragraph 0086, last sentence, page 22).

Independent claim 43 relates to an attention detection system (paragraph 0040, page 9) comprising a portable attention detector 100 (paragraphs 0040 and 0041, page 9) or sensor 203 (paragraphs 0043 and 0044, page 10) for receiving attention clues generated from a self perspective of a host wearer (the male figure of Figure 1 or of Figure 2) of said attention detector 100 or sensor 203. An animate object observing device (paragraph 0041, page 9) or sensor 204 (paragraph 0043, third sentence, page 10; paragraph 0044, penultimate sentence, page 10) observes said host wearer from an observer perspective external of said host wearer. The animate object observing device determines attention clues of said host wearer from said observer perspective externally of said host wearer (paragraph 0041, page 9); paragraph 0045, first sentence, page 10). The attention detector is capable of determining a situation of

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raised attention of said host wearer from said self perspective attention clues, and said received observer perspective attention clues (paragraph 0052, lines 8-15, page 12; paragraph 0083, pages 20, 21).

Independent claim 44 is concerned with a system for detecting the attention level of a first animate object, for example, the male figure on the left side of Figure 2. The system includes a first sensor, for example sensor 100, Figure 1 (paragraph 0040, page 9), or 203 worn by the male figure on the left side of Figure 2, for generating a first signal relating to the attention level of the first animate object 201 from the perspective of the first animate object 201 (paragraph 0043, third sentence, page 10). A second sensor, for example sensor 204 worn by the female figure on the left side of Figure 2, generates a second signal relating to the first animate object from a perspective other than the first animate object (paragraph 0043, last two sentences). A processor (paragraph 0076, page 18) determines that the first animate object 201 has a raised attention level in response to the first and second signals (paragraph 0052, lines 8-15, page 12; paragraph 0083, pages 20, 21).

Independent claim 52 relates to a method of detecting the attention level of a first animate object by sensing the attention level of the first animate object from the perspective of the first animate object (paragraph 0040, page 9; paragraph 0043, third sentence, page 10). A signal relating to the first animate object from a perspective other than the first animate object is generated (paragraph 0043, last two sentences). A determination is made that the first animate object has a raised attention level in response to the sensed attention level and the signal (paragraph 0052, lines 8-15, page 12; paragraph 0083, pages 20, 21).